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(54) Title: VOLUMETRIC ULTRASOUND SCANNING OF SMALLER-SIZED BREAST

(57) Abstract: An apparatus and related methods are described for obtaining volumetric ultrasound scans of a breast of a supine patient in which a fluid reservoir including a bottom flexible membrane contacts an upward-facing surface of the breast. The fluid reservoir is filled with water or other suitable acoustically conductive fluid until the bottom membrane covering the breast is submerged. A transducer surface of an ultrasound probe is submerged in the fluid and moved over and/or around the breast area to obtain the ultrasound scans. Patient comfort is promoted, the patient being able to relax in a supine position during the procedure with a substantially uncompressed breast. Imaging near the chest wall is enhanced, especially for patients having smaller-sized breasts. Also described are preferred embodiments using multiple transducer surfaces in which shadowing effects are reduced.